



## activity 06

# Architectural elements

### Description

In this workshop, the participants will become familiar with five elements of architecture (floor, walls, windows, doors and roof) and understand their relationship with the human body. Each participant will have the opportunity to build their own model, adjust the relationship between each element and play with different colours and materials. By the end of the activity, participants will be able to create a collective model, test the sunlight/shadows and produce pictures to represent their built environment.

### Key words

Floor, Walls, Windows, Doors, Roof, Human body

### Curriculum areas

Mathematics, Design and Technology, Geography, Art and Design

### Participants

KS0/KS1/KS2/KS3/KS4/KS5

### Learning outcomes

- Identify the 5+1 architectural elements
- Understand and visualise the relationship between the 5+1 architectural elements
- Characterise the main function of each element in relationship to the final design

### Required Materials

Cardboard with different colours and textures, scissors, glue, drawing material, 1:100 human scale, white tack, camera

### Facilities

Central tables with chairs

### Duration

70-90 minutes

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### 1. Introduction (3')

Introduce the topic:

Explains the value of the lesson to the learner and provides motivation. Please see description.

### 2. Present the learning outcomes (2')

Write the objectives on the white board and present them to the participants.

### 3. Reflect about the topic (5')

Ask participants to discuss in pairs what makes them comfortable in a built space and consider the five architectural elements (floor, walls, windows, doors and roof).

### 4. Present the five architectural elements individually

#### 4.1. Floor (2')

- Site Location, Genius Loci (geography, topography, cultural elements)
- Solar Orientation
- Shape/Dimensions

#### 4.2. Walls (2')

- Provide structure
- Divide: interior/exterior, public/private, territories
- Proportions (thickness, height)
- Technical performance and materiality

#### 4.3. Windows (2')

- Ventilation, illumination, filtration, framing
- Window vs roof/façade/wall/ceiling
- Window as a place, bay window
- relationship between: interior/exterior, public and private, territories

#### 4.4. Doors (2')

- Function
- Materiality
- Scale/proportions

#### 4.5. Roof (2')

- Shelter
- Flat vs pitched roof
- Symbolic dimension
- Inhabitable space

### 5. The Human body (2')

- The key element in architecture
- The user's needs
- Human scale and proportions

### 6. Model exercise (25')

Considering the five architectural elements and the human body, ask the participants to build their own design out of cardboard. Consider the human scale and represent it in the model. An average person is 1.70m tall.

### 7. Communicating your design (10')

Take pictures of your model from different perspectives and with different backgrounds

### 8. Creating a collective model (10')

Use a white background and display the individual models together. Take pictures and reflect how the buildings interact with each other.

### 9. Evaluation (3')

Considering the objectives of the

session, please rate your learning outcomes from 1 to 5. (1. Poor, 2. Fair, 3. Good 4. Very Good 5. Excellent)

### References

Koolhaas, R. and Easterling, K. (eds.) (2014) Floor. Venice: Marsilio.  
Koolhaas, R. (ed.) and Boom, I. (.) (2014) Wall. Venice: Marsilio.  
Koolhaas, R. (ed.) and Boom, I. (.) (2014) Door. Venice: Marsilio.  
Koolhaas, R. (ed.), Di Robilant, M. (ed.) and Boom, I. (.) (2014) Window. Venice: Marsilio.  
Koolhaas, R. (ed.), Feng, J. (ed.) and Boom, I. (.) (2014) Roof. Venice: Marsilio

### Observations

This activity can be adjusted according to a specific curriculum area. Please give your feedback and let us know if you would like to have any specific support to adjust the activity to your needs: archichild@nua.ac.uk.